

# TERM1 MATH PROJECT GRADE 11 CORE

**Group names:**

- 1-
- 2-
- 3-
- 4-

Submission Date:  
20/11/2011

**Section :**



## Project Objectives:

- Students will reflect their understanding to lessons 13.4, and 13.5 in actual life situations.
- Students will enhance their abilities in solving the triangle using the law of sine and law of cosine
- Students will determine the area of oblique triangle

## PROJECT DESCRIPTION

1. Students will surf the Internet and check the world map for any triangular geographic areas, e.g. countries, cities or Islands like Bermuda Triangle, Sunni Triangle (which extends northwest from Baghdad, Iraq);

They will choose two and write a paragraph of 50 words that gives information about their location, history and their future.

2. Students will download a map of the islands or cities they chose which shows the location of each island on A4 paper.



3. Students will label the vertices of the downloaded triangle and will measure the length of the sides starting from the shortest to the longest.

4. Students will find out the measure of each angle using the law of sine and the law of cosine. They have to compare the circumstances in which they can use the Law of Sines and the Law of Cosines to solve a triangle.

5. students should prove the law they are going to use to solve the triangle (either law of sine or law of Cosines).

6. Students will find out the area of each triangle.



## THE PROCESS

- Students will be divided into groups of 4
- Each group will use the internet or the map books from the library to research information about the three Islands.
- **Students will present their work by submitting three document**
  - A paragraph about the history of the islands .
  - A printout of the used map and mention the source of this map on it.
  - The calculation of how they found the missing terms and the area of the triangle.
  - The references they have used in their research either the URL or books.



## **The material**

- Text book
- Ruler
- Scissors (Optional)
- Calculator
- Computer and Internet connection

## THE RUBRIC

	4	3	2	1	
Completeness of Tasks 20%	Tasks are totally completed and correct. (100%)	Tasks are partially completed, OR Partially wrong.(75%)	Tasks are partially completed, AND Partially wrong (50%).	Tasks are Attempted (25% or less)	_____
Presentation and Integration of Technology 70%	Students used one mean of technology. The tool used helped the student and was useful to support his project. Moreover, the student was able to explain the work he/she submitted confidently and fluently; he/she was <u>able to answer all</u> of colleagues and instructor's questions	Student used a mean of technology but it was not that supportive to the topic. In addition, student was able to explain the work he/she submitted confidently and fluently and he/she reflected an understanding of his/her works. The student was <u>able to answer most</u> of colleagues and instructor's questions.	Student was able to explain the work he/she submitted. Student reflected a shallow understanding of his/her work; she was <u>able to answer some</u> of colleagues and instructor's questions,	Student use of technology was primitive and way below the level of other IAT students. Student was unable to explain the work he/she submitted. Student reflected no understanding of his/her work; he/she was <u>unable to answer any</u> of colleagues and instructor's questions.	_____
Creativity & enrichment 10%	Student had an outstanding addition in <u>all aspects</u> of his/her project.	Student had an outstanding addition in <u>some aspects</u> of his/her project.	Student had an outstanding addition in <u>very few aspects</u> of his/her project.	Student had an outstanding addition in <u>no aspects</u> of his/her project.	_____
This rubric is out of 100, percentage orientation. To make the mark out of 30 (Student's Mark/10*3)				Total	_____